

March 16, 2005

APPLICANT: Westinghouse Electric Company

PROJECT: IRIS DESIGN PRE-APPLICATION REVIEW

SUBJECT: SUMMARY OF FEBRUARY 22, 2005 CATEGORY 1 MEETING WITH
WESTINGHOUSE ELECTRIC COMPANY TO DISCUSS THE
INTERNATIONAL INNOVATIVE AND SECURE (IRIS) PRE-APPLICATION
REVIEW

On February 22, 2005, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Westinghouse Electric Company (Westinghouse). The purpose of this meeting was to (1) discuss the expectations that Westinghouse has of the NRC IRIS pre-application review, (2) discuss the small break loss-of-coolant accident (SBLOCA) phenomena identification and ranking table (PIRT) and scaling submittals, and (3) obtain an overview of the testing program. A list of meeting attendees is included as Enclosure 1. Enclosure 2 contains handouts that Westinghouse provided at the meeting (ADAMS Accession Number ML050550218). A summary of the meeting is included below.

The NRC staff opened the meeting with introductions, explained the purpose of the meeting, and discussed the agenda. Westinghouse then began their discussion of their expectations of the NRC review. They stated that they will submit topical reports on the IRIS test program and additional information on the scaling analysis in April 2005. Westinghouse also expressed interest in reducing the emergency planning zone for IRIS because of the increased level of safety expected for this design. Westinghouse also indicated that there is some interest from American power producers in the IRIS design.

The NRC clarified a statement made by Westinghouse in a letter submitted in December 2004 during this meeting that, "Westinghouse appears to have a complete set of Chapter 15 safety analyses and the results appear to be acceptable." It is more accurate to say that the NRC has not identified any impediments to a possible future design certification based on the IRIS Chapter 15 discussions with Westinghouse to date.

Among the other expectations that Westinghouse has of the NRC are that the NRC will be able to provide approximately 0.5 full-time employee (FTE) support to the IRIS project in calendar year 2005. The NRC agreed that resources to support this level of effort are available. Westinghouse also asked for 1.0-1.5 FTE NRC staff effort for calendar year 2006. The NRC requested that Westinghouse take an action to develop a road map in order to state their expectations for the project which will allow the NRC to better focus their resources on the review effort. The NRC suggested that Westinghouse develop an integrated approach to the project and to avoid incomplete and uncoordinated submittals.

Westinghouse presented an overview of the IRIS test plan. Westinghouse discussed some of the new and unique features of the IRIS design and the types of tests that will need to be conducted. Many IRIS components are similar to those for the AP600 and AP1000 designs, so there is existing test information for those components. However, it is expected that more tests will be required. Westinghouse described three types of tests to be performed: engineering development tests, separate effects component tests, and integral effects tests.

Westinghouse presented an overview of the IRIS SBLOCA PIRT. The NRC staff stated that the PIRT process appears to be appropriate and consistent with other PIRTs. Based on information provided to date, the staff stated Westinghouse's scaling analysis approach seems to be appropriate, but that the staff will need to see stages 3 and 4 before more feedback can be provided. Westinghouse stated that the feedback they desire is on whether the PIRT and scaling analysis processes being applied are correct; not a detailed review of the PIRT or scaling analyses. This review would be more appropriately conducted during the design certification review.

The NRC stressed that new reactor licensing resources are being focused on early site permit applications, design certifications, and combined license applications. When Westinghouse does submit its design certification application, it needs to be complete, including required testing information. Westinghouse stated that they understand and agree with this requirement.

Meeting participants also discussed Westinghouse's objective to reduce emergency planning requirements for IRIS. During an April 15, 2004, meeting the staff stated that changes to emergency response requirements are not being contemplated at this time, and that relaxing these requirements for IRIS would be a policy decision requiring Commission approval. Westinghouse believes that IRIS is sufficiently safe and that a reduction in the emergency planning zone will be justified. Westinghouse stated that the reduction of the emergency planning zone is a long-term goal, and that it is expected that the first IRIS plants will be built at sites using existing emergency planning requirements.

Participants in this meeting tentatively agreed that the next meeting should take place following receipt of the testing program and scaling topical reports, after NRC staff has had an opportunity to familiarize themselves with the information.

Westinghouse plans to revise the reports after considering NRC comments. Westinghouse also expects to submit information regarding emergency planning changes later this year.

Westinghouse's goals are to submit the draft Design Control Document (DCD) at the end of calendar year 2006, obtain design approval by 2010, and have an initial IRIS reactor constructed and operating by 2014.

Please direct any inquires concerning this meeting to Dariusz Szwarc at 301-415-3482, or dxs4@nrc.gov.

/RA/

Dariusz Szwarc, IRIS Project Manager
New Reactors Section
New, Research, and Test Reactors Program
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Office of Nuclear Reactor Regulation

Project No. 726

Attachments: 1. List of attendees
2. Meeting handouts

cc w/ atts: See next page

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Meeting Attendees
NRC/Westinghouse Meeting on the IRIS Pre-application Review
February 22, 2005

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Don Carlson	NRC
Laura Dudes	NRC
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Y. Gene Hsii	NRC
Jay Lee	NRC
Dariusz Szwarc	NRC
Edward Throm	NRC
Joe Williams	NRC
Larry Conway	Westinghouse
Milorad Dzodzo	Westinghouse
Charles Kling	Westinghouse
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